

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
14 October 2004 (14.10.2004)

PCT

(10) International Publication Number
WO 2004/087066 A2

- (51) International Patent Classification⁷: **A61K**
- (21) International Application Number:
PCT/US2004/009548
- (22) International Filing Date: 29 March 2004 (29.03.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/458,218 27 March 2003 (27.03.2003) US
- (71) Applicants (for all designated States except US): **EMORY UNIVERSITY** [US/US]; 1784 North Decatur Road., Suite 130, Atlanta, GA 30322 (US). **THE SCRIPPS RESEARCH INSTITUTE (T.S.R.I.)** [US/US]; 10550 North Torrey Pines Road, La Jolla, CA 92037 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **VAN MEIR, Erwin** [CH/US]; 2525 Oakvale Place, Tucker, GA 30084 (US). **TAN, Chalet** [CN/US]; 2960 Haynes Circle Club, Grayson, GA 30017 (US). **ROECKER, Anthony** [US/US]; 10550 North Torrey Pines Road, La Jolla, CA 92037 (US). **NICOLAOU, Kyrilacos, C.** [US/US]; 10550 North Torrey Pines Road, La Jolla, CA 92037 (US).
- (74) Agent: **VORNDRAN, Charles; Thomas, Kayden, Horst-meyer & Risley, LLP**, 100 Galleria Parkway, N.W. Suite 1750, Atlanta, GA 30339 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PI, PT, RO, RU, SC, SD, SE, SG, SK, SI, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **HIF-1 INHIBITORS**

(57) Abstract: HIF-1 inhibitors and methods of their use are provided. In particular, 2,2-dimethylbenzopyran based compounds and methods of their use, for example in the treatment or prevention of hypoxia-related pathologies are provided.

WO 2004/087066 A2

BEST AVAILABLE COPY